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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/552,018	10/03/2005	Murray Figov	91260MGB	2044
1333 7590 10/18/2007 EASTMAN KODAK COMPANY PATENT LEGAL STAFF 343 STATE STREET ROCHESTER, NY 14650-2201			EXAMINER STEVENOSKY, MARK J	
			ART UNIT 2853	PAPER NUMBER
			MAIL DATE 10/18/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/552,018

Applicant(s)

FIGOV, MURRAY

Examiner

Mark John Stevenosky, Jr.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3,31,32 and 41-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,31,32 and 41-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

Receipt is acknowledged of amendment filed 7/24/2007. Claim 52 has been cancelled without prejudice.

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what the difference is between polymers and undercoating. Examiner assumes it means none of the polymers contained in the undercoating react with each other in the undercoating.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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2. Claims 1,3,31,32,43,46,47,48,51 rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US 4,966,804) in view of Askeland et al. (US 6,443,568) in view of Schwarte et al. (US 5,747,166).

Regarding claim 1, Hasegawa discloses a method of producing ink jet printed images comprising the steps of:

- providing a plastic object [Column 3, Lines 8-13]
- coating at least part of it with an undercoat [Column 3, Lines 45-49]
- providing at least one ink-jet comprising a colorant and aqueous carrier [Column 3, Lines 50-55]
- over-coating the surface with a water based coating [Columns 3-4, Lines 56-17]
- heating the overcoat [Column 4, Lines 17-38]

Hasegawa fails to disclose evaporating after the undercoat step and warming after the inkjet step as well as an undercoat of a non-reactive species.

However, Askeland teaches heating after an undercoat step as well as heating after an inkjet step [Columns 3-4, Lines 55-10]. Thus, it would have been obvious to one of ordinary skill in the art at the time of invention to modify the invention of Hasegawa with the invention of Askeland, as doing so would provide enhanced printing quality by reducing bumps on the ink surface [Column 3, Line 60].

However, Schwarte teaches an undercoat for plastics of polyvinyl alcohol or polyacrylic acid with a pH of between 6.5 and 9 [Columns 9-10, Lines 63-20]. Thus, it would have been obvious to one of ordinary skill in the art at the time of

invention to modify the invention of Hasegawa with the invention of Schwarte, as doing so would provide an aqueous coating with improved properties and produce improved coating films [Column 1, Lines 35-40].

Regarding claim 3, Hasegawa discloses a dye ink [Column 4, Line 42].

Regarding claim 31, Hasegawa discloses a film or sheet of plastic [Column 3, Line 7; examiner has taken a sheet or film to be equivalent to a card, given that a card can be a flat rectangular sheet]

Regarding claim 32, Hasegawa discloses a plastic object of polyvinyl chloride [Column 3, Line 9].

Regarding claim 43, Hasegawa discloses a single printer which performs all of the steps of the method [Column 2, Lines 18-63].

Regarding claim 46, Hasegawa discloses an undercoat in sheet form [Column 2, Line 30].

Regarding claim 47, Hasegawa discloses a plastic card being undercoated, imaged and over-coated [Column 3, Line 7].

Regarding claim 48, Hasegawa discloses a plastic card.

Regarding claim 51, Hasegawa fails to disclose resistance to a Crockmeter, but discloses an object with high physical and chemical resistance and provides examples of such [Column 5].

3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US 4,966,804) in view of Askeland et al. (US 6,443,568) in

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further view of Schwarte (US 5,747,166) in further view of Patterson et al. (US 4,732,786).

Regarding claim 2, Hasegawa in view of Askeland fails to disclose an undercoat of hydrophilic/hydrophobic polymers. However, Patterson discloses an undercoat of hydrophilic/hydrophobic polymers [Column 4, Line 66]. Since Schwarte teaches the same undercoating materials as the specification of the instant application, it is assumed that if the same chemicals don't react with each other for applicant, the same chemicals wouldn't react in prior art. Thus it would have been obvious to one of ordinary skill in the art at the time invention to modify the inventions of Hasegawa and Askeland with the invention of Patterson, as doing so would allow the layer to be receptive to aqueous vehicles in the ink jet ink.

4. Claims 41,42 rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US 4,966,804) in view of Askeland et al. (US 6,443,568) in further view of Schwarte (US 5,747,166) in further view of Uerz et al (US 7,219,989).

Regarding claims 41 and 42, Hasegawa in view of Askeland fails to disclose the limitations. However Uerz teaches an overcoat of watersoluble amino-plasts and acid catalysts as well as water based emulsions plus alkali [Columns 9-11]. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to modify the invention of Hasegawa as modified by

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Askeland with the overcoat of Uerz, as doing so would provide a stain resistant overcoat.

5. Claims 44,49 rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US 4,966,804) in view of Askeland et al. (US 6,443,568) in further view of Schwarte (US 5,747,166) in further view of Yang (US 5,594,044).

Regarding claims 44,49, Hasegawa in view of Askeland disclose a plastic object, but not a bottle specifically. However, Yang discloses printing on a plastic bottle [Column 7-8, Lines 60-10]. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to modify the inventions of Hasegawa and Askeland with the invention of Yang, as it would provide good adhesion and it made of the same material as the plastic from instant application.

6. Claim 50 rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa et al. (US 4,966,804) in view of Askeland et al. (US 6,443,568) in further view of Schwarte in further view of (US 5,747,166) Irihara et al. (US 6,428,143).

Hasegawa in view of Askeland fail to disclose a white undercoat. However, Irihara discloses a white undercoat layer [Column 11, Lines 46-55]. Thus it would have been obvious to one of ordinary skill in the art at the time of invention to modify the inventions of Hasegawa and Askeland with the invention of Irihara, as doing so would provide superior printing quality.

### ***Response to Arguments***

Applicant's arguments with respect to claim 1 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

1. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark John Stevenosky, Jr. whose telephone

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number is (571) 270-1336. The examiner can normally be reached on Monday-Friday 8AM-4:30PM.

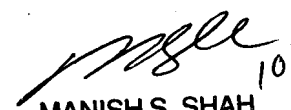
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



10/15/2007

Mark John Stevenosky, Jr.  
Examiner  
Art Unit 2853



10/15/07  
MANISH S. SHAH  
PRIMARY EXAMINER